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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 889,916	10 24 2001	Christian Bochnke	HHI-032US	3006

959 7590 02.19.2003

LAHIVE & COCKFIELD  
28 STATE STREET  
BOSTON, MA 02109

EXAMINER

LIN, KUANG Y

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 02/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/889,916

Applicant(s)

BOEHNKE, CHRISTIAN

Examiner

Kuang Y. Lin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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1. The drawing is objected to in that the claimed "means for adding fibers, particles or similar additive before the molten light metal enters the gap" is not shown. Correction is required.

2. Claims 6-9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification does not find support for the claimed feature of "means for adding fibers, particles or similar additive before the molten light metal enters the gap".

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10 are again rejected under 35 U.S.C. 103(a) as being unpatentable over either Germany 1,508,800 or WO 91/12910 and further in view of Klier et al for the same reasons as set forth in the last office action.

Namely, each of the primary references substantially shows the invention as claimed except the step of reinforcement adding step. However, Klier et al show that it is conventional to add a reinforcement into a molten metal during a composite making process. It would have been obvious to add a reinforcement material into the molten metal of the primary references if a composite article is designated. With respect to claim 3, it would have been obvious to add the

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reinforcement into molten magnesium if the magnesium metal matrix composite is designated.

5. Applicant's arguments filed Feb. 7, 2003 have been fully considered but they are not persuasive.

a. In page 8, first and third complete paragraph of the remarks applicant stated that Germany '800 and WO '910, respectively, fails to teach or suggest that fibers, particles or similar additives are added before the molten light metal enters the gap between multiple cooling bodies. However, applicant's attention is directed to the patent to Klier et al wherein particulate ceramic material is added to molten metal before the molten metal enters the gap between the cooling body. In figure 2 of Kliers et al the mixed slurry enter the gap between the cooling bodies before it exits at location 204. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

b. In page 9, second paragraph of the remarks applicant stated that patent '461 to Klier et al fails to teach or suggest that the molten light metal are fed into to gap between two cooling bodies and divided into pellets of specified size along grooves. However, in figure 2 of Klier et al patent it shows the molten metal are fed between a gap between the two cooling bodies. Although it does not show to

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divide the molten metal into pellets, both primary references do show that feature. Again, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

c. In page 9, third paragraph of the remarks applicant stated that patent '461 to Klier et al do not teach that fibers or the similar additives are added to the molten material before the molten material enters the gap between the cooling bodies. However, it is noted that the scope of claim 1 does not limit the additives to fiber alone. The scope includes the addition of particles and patent '461 does show to add particulate material into the molten metal.

d. In page 10, second complete paragraph of the remarks applicant stated that there is no suggestion or motivation to modify the reference or combine the reference teachings. However, patent '461 does teach that composite materials often have better mechanical properties than either the matrix or the dispersates alone (see col. 1, lines 30-35). In view of the prior art teaching as a whole, it would have been obvious to add particulate material of Klier et al into the molten metal of the primary reference to improve the mechanical properties of their cast product.

e. In page 10, third paragraph of the remarks applicant stated that claimed invention is directed to the production of light-metal pellets, not a final work piece. However, the scope of the claim does not set forth whether the pellets is an immediate or a final work piece.

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f. In the junction paragraph between pages 10 and 11 as well as first complete paragraph in page 11 of the remarks applicant stated that problem occurs when the fiber is added to the molten metal of patent '461 if the product of Klier et al is a final work piece. Again, the scope of the claim doe not limit the additive to fiber alone.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuang Y. Lin whose telephone number is 703-308-2322. The examiner can normally be reached on Monday-Friday, 10:00-6:30,.

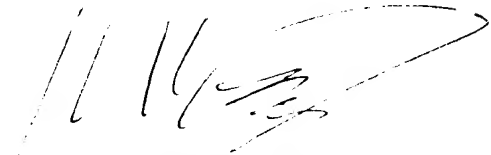
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas X Dunn can be reached on 703-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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February 14, 2003



KUANG Y. LIN  
EXAMINER  
GROUP 320  
1725